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MINERAL INDUSTRY SURVEYS

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TIN IN APRIL 1997

Domestic consumption of primary tin in April was estimated by the U.S. Geological Survey (USGS) to be about 1% higher than in March 1997 and about 4% lower than in April 1996.

The *Platt's Metals Week* composite price for tin was $3.87 per pound; slightly lower than in March and about 10% lower than in April 1996. The April 1997 tin price was the lowest tin price this year, and continued the generally lower drift of tin prices since the start of 1996.

In Pittsburgh, PA, the Steel Recycling Institute (SRI) offered some insights into scrap tin can prices. In May, they quoted prices of about $85-$90 per gross ton, delivered, for truckload shipments of baled cans. Scrap tin cans have become an important scrap charge for integrated as well as mini-mill steel plants.

Also, the SRI reported that more than 70 North American steel producers, suppliers, and affiliated organizations have joined to form The Steel Alliance. The group has launched a 5-year, $100 million advertising campaign to help consumers recognize steel's attributes, including its position as the most recycled material, by total weight, on earth (Container Recycling Report, 1997).

From Kuala Lumpur, Malaysia, a report provides an update on the status of tin mining in Malaysia, which for most of the past century was the world's foremost tin producer. Tin mining in that country has declined markedly in the past decade. The decline was driven largely by lower tin prices, but also by the desire of the Government and companies and employees to move into some fast-growing areas of opportunity like light manufacturing, car-making, electronics, and tourism. Some firms, like Malaysia Mining Corp., have continued their mining activity and also have diversified into other metals and other countries. There are now only 42 tin-mining companies registered in Malaysia, including dredges and open cast mines. Rahman Hydraulic Tin, the oldest operating tin-mining firm in Malaysia, started in 1907, is now the country's largest tin miner (Tin International, 1997b).

In Uxbridge, the United Kingdom, ITRI, the world's foremost tin research laboratory, announced that it has just added Gwalia Consolidated Ltd., the Western Australian mining and mineral processing company, as a full member with a position on the supervisory council. Tin production is a fairly minor part of Gwalia's mining output, at 500 tons annually. The company's Greenbushes Mine, which is 200 kilometers south of Perth, has produced tin almost continuously since 1888. The tin concentrate is smelted on site, and the tin metal is cast into ingots from an electric arc furnace (Tin International, 1997a).

In France, paintmaker Peintures Renaudin announced the development of an electrically conductive paint that can be applied to walls to provide interior room heat. Reportedly, by connecting a 12-volt battery to the painted surface via two electrodes, the painted surface can be heated rather quickly. The firm attributed the addition of conductive tin and antimony oxides as being critical to the phenomenon. The surface of the painted wall could even be covered with ordinary acrylic paint, wallpaper, or tiles. The firm originally intended the paint as a way to warm up drafty French country homes in the winter. But, now it envisions such applications as a coating to prevent water pipes from freezing in the winter and heating systems in cars and trucks (Business Week, 1997).

Update

On June 9, 1997, the *Platt's Metals Week* composite price for tin was $3.85 per pound.

References Cited

Business Week, 1997, Developments to watch: Business Week, no. 3518, March 17, p. 99.

Container Recycling Report, 1997, Steel can recycling: Container Recycling Report, v. 8, no. 5, May, p. 3.

Tin International, 1997a, Gwalia Consolidated joins ITRI as a full member: Tin International, v. 69, no. 10, p. 5.

———1997b, Malaysian developments since world price slump: Tin International, v. 69, no. 10, p. 10.

Prepared by the Metals Section and the Data Collection and Coordination Section, June 11, 1997.

TABLE 1
SALIENT TIN STATISTICS 1/

(Metric tons, unless otherwise noted)

		1997		
	1996 p/	March	April	January-April
Production, secondary e/ 2/	10,800	900	900	3,600
Consumption:				
Primary	37,700	3,140	3,180	12,700
Secondary	11,100	883	887	3,580
Imports for consumption, metal	33,200	2790	NA	NA
Exports, metal	2,790	399	NA	NA
Stocks at end of period	4,670	5,600 r/	5,290	XX
Prices (average cents per pound): 3/				
Metals Week composite 4/	412.43	395.64	386.55	XX
Metals Week New York dealer	288.10	274.94	265.81	XX
London, standard grade, cash	279.00	267.00	259.00	XX
Kuala Lumpur	275.19	262.57	256.98	XX

e/ Estimated. p/ Preliminary. r/ Revised. NA Not available. XX Not applicable.

1/ Data are rounded to three significant digits, except prices.

2/ Comprises tin recovered from alloys and tinplate. The detinning of tinplate (coated steel) yields only a small part of the total.

3/ From Platt's Metals Week.

4/ The Metals Week composite price is a calculated formula, not a market price, that includes fixed charges, finance charges, and a risk factor. It normally is substantially higher than other tin prices.

TABLE 2
METALS WEEK COMPOSITE PRICE 1/

(Cents per pound)

Period	High	Low	Average
1996 (annual)	436.25	388.49	412.43
1996:			
April	435.05	422.96	429.61
May	436.25	415.30	426.88
June	418.01	410.83	413.65
July	423.04	408.27	417.03
August	411.84	407.75	409.11
September	413.10	402.69	408.04
October	404.38	396.12	400.25
November	409.57	392.40	401.00
December	405.37	388.49	394.76
1997:			
January	404.19	387.89	396.17
February	403.46	390.40	395.64
March	401.81	389.32	395.64
April	393.82	380.00	386.55

1/ The Metals Week composite price is a calculated formula, not a market price, that includes fixed charges, finance charges, and a risk factor. It normally is substantially higher than other tin prices.

Source: Platt's Metals Week.

TABLE 3
TINPLATE PRODUCTION AND SHIPMENTS IN THE UNITED STATES 1/

(Metric tons, unless otherwise noted)

Period	Tinplate waste (waste, strips, cobbles, etc.) (gross weight)	Tinplate (all forms) Gross weight	Tin content	Tin per metric ton of plate (kilograms)	Shipments 2/
1996 p/	181,000	1,550,000	9,620	6.2	2,750,000
1997:					
January	15,900	140,000	853	6.1	204,000
February	13,600	138,000	775	5.6	183,000
March	12,700	144,000	676	4.7	205,000
April	13,800	147,000	776	5.3	NA

p/ Preliminary. NA Not available.
1/ Data are rounded to three significant digits.
2/ Shipments data from American Iron and Steel Institute monthly publication AIS10.

TABLE 4
U.S. TIN IMPORTS FOR CONSUMPTION AND EXPORTS 1/

(Metric tons)

Country or product	1996 p/	1997 February	1997 March	1997 January-March
Imports:				
Metal (unwrought tin):				
Bolivia	6,290	606	79	765
Brazil	9,460	1,200	500	2,440
Chile	407	--	--	261
China	2,760	243	410	1,010
India	898	258	120	618
Indonesia	7,550	590	520	1,710
Malaysia	965	40	--	440
Peru	481	363	939	1,980
Russia	435	100	67	167
Other	922	57	155	307
Total	30,200	3,460	2,790	9,700
Other (gross weight):				
Alloys	11,800	734	465	2,090
Bars and rods	695	52	65	187
Foil, tubes, and pipes	(2/)	(2/)	--	(2/)
Plates, sheets, and strip	641	10	--	29
Waste and scrap	6,740	203	136	791
Miscellaneous	1,360	103	121	321
Total	21,300	1,100	787	3,420
Exports (metal)	4,780	399	326	1,140

p/ Preliminary.
1/ Data are rounded to three significant digits; may not add to totals shown.
2/ Less than 1/2 unit.

Source: Bureau of the Census.

TABLE 5
CONSUMPTION OF TIN IN THE UNITED STATES, BY FINISHED PRODUCT 1/

(Metric tons of contained tin)

		1997						
		March			April			January-April
Product	1996 p/	Primary	Secondary	Total	Primary	Secondary	Total	total
Alloys (miscellaneous) 2/	418	31 r/	--	31 r/	35	--	35	137
Babbitt	201	20	W	20	19	W	19	75
Bar tin and anodes	100	W	--	W	8	--	8	W
Bronze and brass	1,890	68	96	164	61	97	158	629
Chemicals	6,950	731	W	731	624	W	624	2,610
Collapsible tubes and foil	255	48	W	48	21	--	21	105
Solder	8,920	469	W	469	523	W	523	2,050
Tinning	1,640	137	--	137	134	--	134	539
Tinplate 3/	9,620	676	W	676	776	--	776	3,080
Tin powder	573	W	W	W	48	--	48	192
White metal 4/	W	W	W	W	W	--	W	W
Other	1,370	61	287	348	35	290	325	1,310
Total reported	31,900	2,240 r/	383	2,620 r/	2,280	387	2,670	10,700
Estimated undistributed consumption 5/	16,800	900	500	1,400	900	500	1,400	5,600
Total	48,800	3,140 r/	883	4,020 r/	3,180	887	4,070	16,300

p/ Preliminary. r/ Revised. W Withheld to avoid disclosing company proprietary data; included with "Other."

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Includes terne metal.

3/ Includes secondary pig tin and tin acquired in chemicals.

4/ Includes pewter, britannia metal, and jewelers' metal.

5/ Estimated consumption of plants reporting on an annual basis.

TABLE 6
DEFENSE LOGISTICS AGENCY
TIN STOCKPILE DISPOSALS 1/

(Metric tons)

Period	Monthly disposals 2/
1996:	
April	5
May	10
June	330
July	1,180
August	1,370
September	2,300
October	--
November	210
December	200
Year total	6,670
1997:	
January	215
February	200
March	115
April	60
Total	590

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ These disposals represent only the daily, spot sales program. They do not include the long-term dealer contract sales program.

Source: Defense Logistics Agency.